Continuous Water Quality Monitoring on the Upper Rio Grande Segments 2307 and 2314

Project Background: The lack of flows and the subsequent impact on water quality in the Rio Grande is of international, national, and regional concern. In addition, the upper Rio Grande has been affected by drastic hydrological modifications developed to divert water for irrigation and drinking water. In the recent past, little water remains after irrigation withdrawal in the upper part of the Rio Grande Basin. Long-term drought throughout northern Mexico, the desert southwest, and the southern Rockies in the U.S. has put pressure on an already over-appropriated basin. The end result is increasing dissolved solids and salinity.

This project will provide data to support a Texas Surface Water Quality Standards (TSWQS) review for total dissolved solids (TDS) and chloride for the upper Rio Grande (2306, 2307, 2308, and 2314). The result of the project will also support a possible revision to these segment boundaries (in the TSWQS) to be more protective of water quality and address severe water quantity issues.

Project Description: Continuous measurements will be reported from two locations on the Upper Rio Grande near El Paso, Segments 2307 and 2314.

These sites will report in-situ water quality measurements of specific conductance, temperature, pH, and dissolved oxygen. Flow will be obtained from the adjacent International Boundary and Water Commission (IBWC) gauging station (http://www.ibwc.state.gov/wad/rtdata.htm).

The sites were deployed and operational on February 2, 2005.

The project is being coordinated by Christine Kolbe, Aquatic Scientist, TCEQ Surface Water Quality Monitoring (SWQM) Team. The El Paso monitoring site will be operated and maintained by TCEQ Region 6 SWQM staff , Field Operations Division. The Fort Quitman site will be operated and maintained by the IBWC, El Paso.

Sites:

1. CAMS # 0718–Rio Grande at El Paso (IBWC gauging station 08-3640.00)
2. CAMS # 0719–Rio Grande at Fort Quitman (IBWC gauging station 08-3705.00)